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with these reports and adds supportive long-term information.

Dr. Kajimoto and colleagues point out that the lower number of bypasses in our OPCAB group is a limitation and suggest the possibility of different outcomes with more competent hands. However, they provide no evidence of equal or greater numbers of bypasses with OPCAB compared with on-pump CABG in the Japanese registry. The early OPCAB outcomes in the Japanese registry are excellent, but so are the OPCAB outcomes of experienced surgeons throughout the world. Our question was whether the early benefits of OPCAB are more sustainable over significantly longer periods than on-pump CABG, and our results cast doubts on this possibility. Again, Dr. Kajimoto and colleagues provide no evidence showing superior long-term benefits in terms of reduced mortality with OPCAB over on-pump CABG in the Japanese registry. If a lower number of bypass grafts is a technical limitation of OPCAB, perhaps surgeons should revise their strategy accordingly to ensure superior bypass quality and completeness of revascularization (3–5), especially in light of recent studies, including ours that support this viewpoint.

With regard to possible bias in coronary lesion severity, the 2 groups in our study were matched by a rigorous process of statistical verification, including propensity score matching and inverse probability weighting. If there was any bias in lesion severity, the inclination would have been toward on-pump CABG rather than OPCAB.

Finally, Dr. Kajimoto and colleagues question the quality of our OPCAB data and, by extension, the reliability of our study by pointing that "South Korean surgeons were still acquiring the required techniques." We would like to note that our study was not a registry outcome analysis (i.e., a Korean registry), as erroneously alluded to by Kajimoto et al., but rather a single institutional analysis of the outcomes of experienced surgeons. Our single institutional study draws on a population of more than 5,000 patients with isolated CABG, including more than 2,000 patients who underwent OPCAB. Questioning the experience and expertise of surgeons in such a setting places a higher standard than that considered more than acceptable internationally. The OPCAB data derived from surgeons showing an on-pump conversion rate of 2% and early mortality rate of 0.9% can hardly be seen as premature or inadequate by any standards in published research, even from Japan. Unless the credibility of our report itself is in question, which would be another matter, the confusion of Dr. Kajimoto and colleagues regarding the details and design of our report upon which their hasty conclusions were based warrants careful re-perusal of the contents.

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How to Determine a Metabolically Healthy Body Composition in Cardiovascular Disease

We read the recent paper by Chang et al. (1) with great interest. The investigators observed that the so-called metabolically healthy obesity (MHO) phenotype was associated with subclinical coronary atherosclerosis (CA) in 14,828 healthy subjects. CA was identified by cardiac computed tomography and calculation of the coronary artery calcification (CAC) score. The investigators conclude that MHO per se is harmful and the term "metabolically healthy" in obese patients is a mere artefact. This interpretation of the data, however, is arguable on several counts.

In the consensus document on CAC scoring, a score ranging 1 to 112 is considered to indicate mild risk and a score of 1,000 to indicate very high risk of cardiovascular (CV) events; a score ≥400 is equivalent to an

intermediate risk in asymptomatic patients (2). In contrast, in the current paper, a cutoff CAC score of >80 was used to investigate a higher CV risk. The investigators do not provide the frequency distribution of the CAC score or the mean value in this patient group with a score >80. If a skewed distribution of CAC scores may be assumed with many patients having a score <112 and the majority <400, the reported CAC score-grouping >80 by itself means nothing for a person's individual risk.

The frequency of a CAC score >80 was roughly doubled in the MHO group compared with normal weight subjects. However, metabolically relevant risk factors such as smoking and alcohol intake were also almost doubled in the MHO group compared with normal weight subjects, and the proportion of men (who have a higher risk of CV disease than women) was almost 3 times higher. Thus, does the risk of CA in the MHO group really rely on obesity and not on other factors?

In addition, the investigators split the study population into 4 groups for body mass index (BMI) according to the Asian-specific criteria, in which people with a BMI ≥25 kg/m^2 are considered obese and those with a BMI of 23 to 25 kg/m^2 are considered overweight. This is in contrast to the World Health Organization criteria for overweight (BMI of 25 to 30 kg/m^2) and obesity (BMI ≥30 kg/m^2) (3). This shift toward lower cutoff values may influence the results of the report and thus render the findings less applicable for Western populations.

Finally, it may be challenged that a BMI of 18.5 to 23 kg/m^2 represents subjects with optimum metabolic health with regard to optimum survival as the most relevant clinical endpoint. In multiple epidemiological studies, the nadir of the U-shaped association between body weight and longevity was clearly around a BMI of 25 kg/m^2 or slightly higher (4), with a significant increased risk for patients with a BMI <22 kg/m^2 (5). Notably, in patients with some degree of CV disease, such as those with chronic heart failure, the presence of overweight and mild obesity is, in fact, a very *positive* prognosticator independent of other metabolic and clinical variables (6,7).

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Metabolically Healthy Obese Versus Cardiorespiratory Fit Obese: Is It Time to Bring Them Together?

During the past decade, the term "metabolically healthy obesity" (MHO) has been used in published reports. This phrase has gained popularity over the past year in particular, appearing in approximately 19 papers in PubMed thus far in 2014, not to mention the recent high-profile Whitehall II cohort study by Hinnouho et al. (1).

The obesity paradox focuses on the fact that as various parameters of body composition (such as body mass index) increase, there seem to be mortality benefits, especially in patients with coronary artery disease, heart failure, pulmonary hypertension, and chronic obstructive pulmonary disease (2). It has also been shown that cardiorespiratory fitness (CRF) markedly alters the relationship between adiposity and subsequent prognosis (2–5). A recent paper by Myers et al. (6) highlighted that CRF has not gained the same positioning as other risk factors, despite the emphasis on the importance of CRF by the American Heart Association (7) and other professional organizations. However, these seemingly paradoxical